



2013 Annual Drinking
Water Quality Report
(Consumer Confidence Report)
City of Killeen www.killeentexas.gov
Phone No: (254) 501-6500



Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

The City of Killeen is dedicated to providing an adequate supply of safe and reliable drinking water. Our employees take pride in delivering water to your tap that meets or exceeds all federal (EPA) drinking water standards. This report is a summary of the quality of water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. Even though our water met or exceeded all requirements, we are providing this information so that you become more knowledgeable about your drinking water.

Water Sources:

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land, or through the ground, or falls through the air, it accumulates naturally occurring minerals and, in some cases, chemical or biological substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily cause for health concerns. For more information on taste, odor, or color of drinking water, please contact the City of Killeen Water & Sewer Services Department at (254) 501-6500.

Where do we get our drinking water?

City of Killeen drinking water is obtained from a surface water source Belton Lake located in Belton, Texas. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system, from which we purchase our water, Bell County Water Control & Improvement District No. 1, received the assessment report. For more information on source water assessments and protection efforts at our system, contact City of Killeen Water & Sewer Services Department at (254) 501-6500.

Special notice for the elderly, infants, cancer patients, persons with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (1-800-426-4791).

FOR MORE WATER QUALITY INFORMATION

Bell County Water Control & Improvement District No. 1, P.O. Box 43, Killeen, Texas 76540-0043, (254) 501-9243. www.wcid1.org
Texas Commission on Environmental Quality (TCEQ), www.tceq.texas.gov
EPA Safe Drinking Water Hotline, (800) 426-4791 or <http://water.epa.gov>
Water Billing Questions – City of Killeen Utility Collections, (254) 501-7800
Water or Sewer Problems/Emergencies – City of Killeen Water & Sewer Services, (254) 501-6500
City of Killeen Website www.killeentexas.gov

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (254) 501-6500.

Public Participation Opportunities

The City Council meets in regular session on the second and fourth Tuesday of each month in the Council Chambers located in the Killeen City Hall building at 101 North College Street. Council workshops are also scheduled each month on the first and third Tuesday. To find the next scheduled meeting, visit the City of Killeen website www.killeentexas.gov or call Killeen City Hall at (254) 501-7700. The Lake and River Cleanup Program is an effort between Keep Texas Beautiful, Texas Commission on Environmental Quality, and the City of Killeen. If you would like to participate, contact the Water & Sewer Services Department at (254) 501-6500 for more information.

ALL drinking water may contain contaminants.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. When drinking water meets federal standards, there may not be any health-based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron), which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Backflow Prevention and Cross Connection Control

Under Texas Administrative Code (30 TAC, §290.46(j)), a customer service inspection (CSI) is required for each service connection before continuous water service can be provided. A municipality is also required to have a backflow prevention program or a cross connection control program. No water connection from any public drinking water supply system shall be allowed to any residence or establishment where an actual or potential contamination hazard exists unless the public water facilities are protected from contamination. Under the Federal Safe Drinking Act of 1974, and the rules adopted by the Texas Commission on Environmental Quality under 30 TAC, Chapter 290, the water purveyor has the primary responsibility for preventing water from unapproved sources, or any other substances from entering the public potable water system. For more information on Backflow Prevention and Cross Connection Control please call (254) 501-6500, option 4.

About the following pages

The pages that follow list the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ABBREVIATIONS

NTU - nephelometric turbidity units (a measure of turbidity)

MFL - million fibers per liter (a measure of asbestos)

mrem/year - millirems per year (a measure of radiation absorbed by the body)

pCi/L - picocuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/L)

ppb - parts per billion, or micrograms per liter (µg/L)

ppt - parts per trillion, or nanograms per liter (ng/L)

ppq - parts per quadrillion, or picograms per liter (pg/L)

WATER QUALITY DATA TABLE

The table below lists all the contaminants that were detected in your drinking water during calendar year 2013. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Inorganic Contaminants								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Asbestos	0.1987	0.1987	0.1987	7	7	MFL	Decay of asbestos cement water mains; Erosion of natural deposits
2008	Barium	0.06	0.06	0.06	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2013	Fluoride	0.20	0.00	0.46	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2013	Nitrate	0.0816	0.0375	0.20	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Radioactive Contaminants								
Collection Date	Contaminant	Maximum Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contaminant
06/18/2009	Beta/photon emitters	5.5	4-5.5	0	4	Mrem/yr	N	Decay of natural and man-made deposits.

Synthetic Organic Contaminants Including Pesticides									
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2013	Atrazine	0.1008	0.08	0.19	3	3	ppb	N	Runoff from herbicide use on row crops.
2013	Di (2-ethylhexyl) phthalate	<.51	<.51	<.51	6	0	ppb	N	Discharge from rubber and chemical factories.

Maximum Residual Disinfectant Level								
Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2013	Chloramine Residual	2.7975	0.60	4.20	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts							
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2013	Total Haloacetic Acids	12.4	4.0	18.4	60	ppb	Byproduct of drinking water disinfection.
2013	Total Trihalomethanes	21.7	18.5	24.7	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants						
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.						
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2013	Chloroform	8.4	5.7	7.31	ppb	Byproduct of drinking water disinfection.
2013	Bromoform	1.3	1.0	1.72	ppb	Byproduct of drinking water disinfection.
2013	Bromodichloromethane	8.3	6.7	9.66	ppb	Byproduct of drinking water disinfection.
2013	Dibromochloromethane	5.6	4.6	6.41	ppb	Byproduct of drinking water disinfection.

Turbidity						
Turbidity has no health effects; however, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.						
Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2013	Turbidity	0.29	100.00	0.3	NTU	Soil runoff.

Total Coliform Bacteria						
Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive Samples	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Source of Contaminant
0	5% of monthly samples are positive	1.5	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	1	N	Naturally present in the environment.

Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action	Action Level	Unit of Measure	Violation	Source of Contaminant
2012	Lead	2.12	0	15	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits.
2012	Copper	0.129	0	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Total Organic Carbon

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2013	Source Water	7.67	4.39	13.0	ppm	Naturally present in the environment.
2013	Drinking Water	2.39	0	4.99	ppm	Naturally present in the environment.

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING (TCR), REPEAT MINOR	6/1/2013	6/30/2013	The City of Killeen failed to collect all of the follow-up samples in response to finding total coliform bacteria in a routine sample. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. The City of Killeen resolved this violation by following the TCEQ guideline which requires public notification.

Violations Table

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO (JUNE 2013) VIOLATION	10/10/2013	10/25/2013	During the June 2013 violation the City of Killeen failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. This violation was resolved, as stated above, by following the TCEQ guideline which requires public notification.